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Independent selenocentric system of coordinates by large-scale star-calibrated lunar photography

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Abstract

The selenocentric coordinates of 263 craters and one mountain are given. The scale and orientation of the selenocentric coordinates system is determined by star-calibrated lunar photographs obtained with the long-focus horizontal telescope. The origin of the system is defined by the theory of the motion of the Moon. The physical libration is taken into account for the reduction of the coordinates system to the principal axes of the lunar inertia. The reference stars coordinates are reduced to the FK4 system. The position of the lunar mass centre is determined by LURE-2 theory, the rotation parameters are taken from the Migus tables (Migus, 1980). © 1984 D. Reidel Publishing Company.

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